

ABSTRACT

An air exchange assembly that allows for the passage of large volumes of air through a continuously rotating joint. The large cross section of the passageways in the air exchange assembly allow for a large volume of low pressure air to pass through in both directions to make a closed loop air cooling system possible. The invention supports air flows of 10,000 standard cubic feet per minute (scfm) of air through two 20 inch diameter ducts through the rotating joint. The basic design can be scaled to allow for small ducting and lower air flow or larger ducting and higher airflow. The invention can also be scaled to provide for more channels of air flow.